

CLAIMS

1. A tube retainer comprising:
a tube having a retention groove formed in an external surface, adjacent an open end, of said tube, and
a holding clamp adapted to engage said retention groove.
2. A tube retainer as claimed in Claim 1, wherein the retention groove is annular.
3. A tube retainer as claimed in Claims 1 or 2, wherein the holding clamp is a flat plate having a slot formed therein for engaging the retention groove.
4. A tube retainer as claimed in Claim 3, wherein the slot is open ended such that it is formed from the peripheral edge of the flat plate.
5. A tube retainer as claimed in any of the preceding claims, wherein the tube further comprises a second seal groove formed in the external surface thereof interposed between the retention groove and the open end of the tube, wherein the sealing groove is adapted to receive sealing means.
6. A tube retainer as claimed in Claim 5, wherein the sealing means is an O ring.

7. A tube retainer as claimed in any of the preceding claims, wherein said holding clamp is attached to a device, said device having an inlet/outlet port therein for receiving said tube.

8. A method of manufacturing a tube retainer, as claimed in Claim 1, comprising the steps of:

providing a tube;

forming a retention groove in the external surface of said tube, adjacent the open end of said tube;

providing a flat plate and forming a slot in said flat plate to form a clamping plate.

9. A method as claimed in Claim 7, comprising a further step of:

forming a second seal groove in the external surface of the tube, said second seal groove being formed such that it is suitable for receiving sealing means.

10. A method as claimed in Claim 8, whereby the second sealing groove is formed in the external surface of the tube between the retention groove and the adjacent open end of the tube.

11. A method as claimed in Claims 7 to 9, whereby at least one of the retention groove and second seal groove is formed in the external surface by rolling a groove therein.

12. A method as claimed in Claims 7 to 9, whereby at least one of the retention groove and second seal groove is formed in the external surface by cutting a groove therein.

13. A method of retaining a tube to engage a device comprising:
forming a retention groove adjacent to an end of the tube;
forming a slot in a holding clamp to engage said annular retention groove;
attaching said holding clamp with the tube to the device.

14. A method as claimed in Claim 12, whereby the retention groove is annular.

15. A method as claimed in Claims 12 and 13, further comprising forming a second seal groove between said retention groove and said end of said tube for receiving sealing means.